

FOREIGN FISHERY TRADE

Imports and Exports

GROUND FISH IMPORTS: Imports of fresh and frozen groundfish (fillets, steaks, etc., of cod, haddock, hake, cusk, pollock, and rosefish), within quota limitations, under the reduced tariff provided under trade agreements, totaled 2,379,332 pounds during March, according to a preliminary report from the Bureau of Customs, Treasury Department.

Country	1947		1946	
	March	3-month Total	March	3-month Total
Canada	1,291,972	3,662,728	3,196,364	8,920,812
Newfoundland	592,360	1,109,750	382,766	1,037,047
Iceland	495,000	584,402	1,816,350	2,417,450
Total	2,379,332	5,356,880	5,395,480	12,375,309

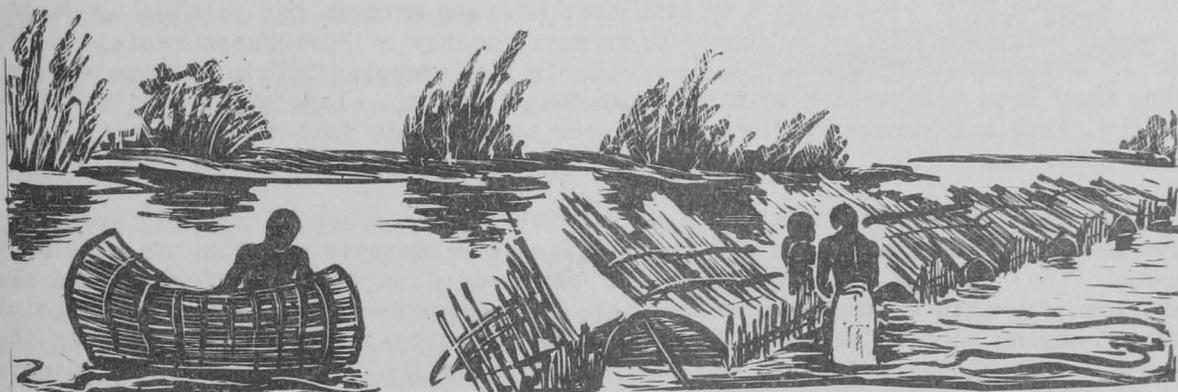


Africa

FISHERIES RESEARCH LABORATORY IN UGANDA: A Fisheries Research Laboratory is now being built at Jinja. When completed, it will accommodate a team of scientists, each of whom will be a specialist in his own field, according to a report received by the American Consulate General, Nairobi, Colony of Kenya, Africa.

The best use of the African lake fisheries can only be made after assessing the potential productivity of the various waters, and then encouraging the African fishermen to use methods which will give a sustained yield both for their own consumption and for trade beyond the lake areas.

The first part of the Laboratory's program can only be achieved by studying those factors which determine productivity. In agriculture and animal husbandry, productivity is determined by the texture and chemical composition of the soil and the available sunlight. Exactly the same principles apply to fisheries. Thus, work will be undertaken to study the principal sources of the nutrient salts; e.g., nitrates, phosphates, etc. These salts are derived from inflowing water and from the decomposition of the bottom deposits. The utilization of these salts depends on currents which cause circulation of the water and maintain either an adequate



or inadequate concentration in surface waters where the light is sufficient for plants to develop. Plants include not only submerged and rooted vegetation, but the far more important microscopic plants which live suspended in the water or grow up as an encrusting film on the woods, stones, or mud of the lake down to depths where there is sufficient light.

Some fish feed directly on these smaller plants. More usually, however, fish feed on other animals. Therefore, it is necessary to study these animals--insect larvae, snails, etc.--which feed on the plants and are the principal food of the fish.

Work will, of course, be done at the same time on the habits and life histories of the fish themselves and on their distribution within the lake. The study of the fish alone will be a considerable undertaking as there are nearly 200 different varieties of fish in Lake Victoria.

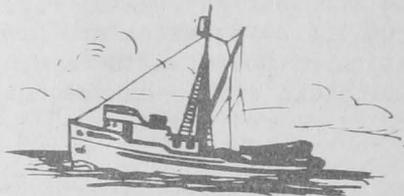
Advice based on the Laboratory's investigations will be given to the African fishermen through the proposed Lake Victoria Fishery Board.



Costa Rica

FISHERIES: Tuna: The Gulf of Lower California under Mexican jurisdiction and the Gulf of Nicoya in Costa Rican waters are among the few places in the world where sardines and anchovies can be found in sufficient quantity to supply live bait for the tuna fishing fleets, according to the American Embassy at San José, Costa Rica, in its report dated March 31, 1947, on the economic developments in Costa Rica during 1946. Boats out of San Pedro, Calif., come down to Puntarenas, catch bait in the Nicoya Gulf, and then range the waters outside for hauls of tuna. Some of the best grounds are off the shore of Cocos Island, owned by Costa Rica, and it is not uncommon for the fleets to proceed south to the Galapagos Islands in search of the tuna schools.

Once they have a load of fish, they can either pack it in ice or brine and return to the home port in California, or turn it over to an American freezing and packing company in Puntarenas. In the latter event, they can bait up and return to the nearby fishing grounds for another catch. A few vessels remain based on Puntarenas most of the time to maintain a steady supply for the American plant referred to above.



All that has been said so far relates to "bait-boat" fishermen, mostly of Portuguese racial stock, who use nets only when trapping bait in inshore waters. When they come to a school of tuna, they dump live bait close overboard, and literally fling the intruding large fish over their heads into the boat with barbless hooks and poles.

Another way of fishing for tuna is with purse seines, a method favored by Americans of Dalmatian stock who are in ceaseless competition with the bait-boat group. Late in 1945, one purse-seiner ventured down from California with his boat and came into Puntarenas for supplies. His appearance gave rise to an official order denying port and customs facilities to any purse-seine fishing craft on the ground that seining was destructive of the fish supply in jurisdictional waters.

The vessel left the vicinity without much ado, and nothing was heard of the seine fishermen again until January 1947, when a mother ship, the Pacific Explorer, put into the Gulf of Nicoya, ready to service the seine fleet and refrigerate its catch.

To resolve the controversy which is now in full progress over fishing rights and methods, bait fees, customs procedure and other phases of the industry, the government is holding administrative hearings to enable both sides to present their briefs. The prohibition against seine boats is in suspense. New and more comprehensive legislation will probably be the end result. Meanwhile the rival factions are strenuously campaigning against each other in the San José press.



The tuna freezing plant in Puntarenas dates from 1935, while the canning factory associated with it began to produce in 1942. The table of tuna exports below traces the industry's progress for the last decade.

Tuna Fish: Exports from Costa Rica, 1935-1946

Year	Fresh ^{1/}		Canned		Year	Fresh ^{1/}		Canned	
	Gross kilos	Dollars	Gross kilos	Dollars		Gross kilos	Dollars	Gross kilos	Dollars
1937	2/ 126,170	19,250	-	-	1942	1,066,294	117,703	7,812	4,058
1938	3,363,967	453,787	-	-	1943	450,673	73,078	20,675	20,092
1939	3,393,300	413,441	-	-	1944	863,994	413,182	10,454	9,587
1940	1,910,582	244,432	-	-	1945	651,190	112,759	226,515	185,167
1941	837,811	147,920	-	-	1946 ^{3/}	1,261,000	202,000	321,000	311,000

^{1/}Including only that cleared through customs; fish caught offshore and carried direct to California would not show in this tabulation.

^{2/}This was the first year exports were made.

^{3/}Preliminary.

Source: Compiled from data of the Dirección General de Estadística.

Fish brought into territorial waters by the small vessels and transferred to the mother ship pass through customs in the same manner as that delivered to the refrigerating plant on shore. If the Pacific Explorer remains within Costa Rican jurisdiction until filled, and returns for more, the 1947 export statistics for fresh tuna should appreciably exceed those of the last few years.

Sharks: Extraction of the livers from sharks began to be reflected in Costa Rican export statistics in 1943, during which year, 147 metric tons were shipped with a declared value of \$81,890. Exports in 1946 were less in volume (105 tons) but almost as great in value (\$79,000). Shark fishing is conducted almost entirely from Puntarenas, using porpoise for bait.

The Costa Ricans have not yet acquired a taste for shark meat, nor do they bring the carcasses in for fish meal or fertilizer.

Turtles: In 1946, exports of live turtles amounted to 127 metric tons valued at \$5,000. Turtles ranked 21st among the export commodities.



Ecuador

MOTHER SHIPS PERMITTED: The use of mother ships for fishing in Ecuadoran waters is permitted, according to the terms of an Executive Decree signed by the President of Ecuador on January 17, 1947, according to a dispatch from the American

Embassy, Quito, Ecuador. This step was taken when it was learned that foreign companies, interested in fishing in Ecuadoran waters, planned to use mother ships.

Under the terms of the decree, the following annual fees are payable by mother ships:

Consular Matriculation, Annually - \$300.00	Second Trip	- \$8.00
First Trip	- 9.00	Third and Subsequent Trips - 7.00

The above payments are stated in American dollars. The Central Bank's effective selling rate for the dollar is 15.04 sucres, its effective buying rate is 13.40 sucres.

It is further provided, under the Decree, that the mother ship will remain at the port of San Cristobal, while actual fishing activities are engaged in by the smaller fishing boats, for the period of time set forth for the voyage.

A third provision states that the Ecuadoran Consul concerned will write, on the reverse of the fishing permit of the mother ship, the declaration of the captain or agent of the ship, and the name and net tonnage of each of the fishing boats accompanying the mother ship. It is also stated that the name and registered tonnage of the mother ship will be noted on the registrations and permits of each of the smaller fishing boats.

The Ministers of National Defense, Social Welfare, Treasury, and Economy are charged with the execution of this Decree.



France

FISH INDUSTRY ON ST. PIERRE AND MIQUELON: Early in March, a Newfoundland newspaper reported on the subject of the expansion of the fresh fish industry on the French islands of St. Pierre and Miquelon as follows:

ST. PIERRE TO ENTER FRESH FISH INDUSTRY ON BIG SCALE

Government of France Makes Sizable Loan for Reconstruction
Cold Storage Plant and Building of Trawlers

The French islands of St. Pierre and Miquelon will this year launch out in the fresh fish industry on an extensive scale. It is hoped that the industry will provide employment for most of the islands' 4,000 population.

In conversation with a St. Pierre businessman a reporter was advised that the Government in France have voted an amount equivalent to about \$5,000,000 to set up the fresh fish industry on the island. It is hoped that this new enterprise will remedy the existing problem of unemployment which has seriously affected the St. Pierre economic set-up in recent years. During the colourful days of rum running St. Pierre enjoyed an era of prosperity from smuggling operations. Today, the St. Pierrois are compelled by circumstances to return to the occupation of their forefathers--fishing.

At present, workmen are engaged at St. Pierre making extensive alterations to the old cold storage plant there. The entire plant is being remodelled, and will be equipped with the latest in quick, or sharp freezing apparatus. Seven new modern,

fast, Diesel driven trawlers are under construction at American shipbuilding yards and will soon be delivered to the Government at St. Pierre. These trawlers will operate on the Grand Banks and will make weekly trips between the fishing grounds and the fish plant, where the fish will be sharp frozen and later exported in refrigeration ships to France.

We are also advised that trawlers fishing from France will use St. Pierre as a base for their operations this season. Ten trawlers operated from France on the Grand Banks last year, but 28 ships are under construction at the present time and will probably be in operation before the end of the current fishing season. Part of the catches of the trawlers from France will be landed at St. Pierre to be shipped to France in the autumn.

It is expected that the new plant at St. Pierre and the added business provided by the trawlers from France will solve the unemployment situation on the island and provide the inhabitants with much needed work and earnings.



Mexico

NEW MEXICAN ABALONE REGULATION: The following is a translation and condensation of an Order published in the Dairio Oficial of March 14, 1947, which effects a new regulation for the various species of abalones of Lower California:

1. It restricts the taking of abalones to those cooperatives which have previously been in operation. If the abalones prove to be sufficiently abundant, other cooperatives may be permitted to fish.
2. The abalones taken must be offered first to the established canneries. They must also be offered in a certain percentage which will be fixed by the Ministry of Marine, to those cooperatives filleting them for Mexican markets. No other use of abalones is permitted.
3. The abalone beds are to be surveyed and the production is to be limited accordingly.
4. Until the surveys have been completed, the cooperatives must limit their fishing activities to the zone in which their legal residence occurs. For this purpose Lower California is divided into three zones.
5. The shore plants are permitted to use floating plants in conjunction with the shore plants. The floating plants cannot operate within a radius of 120 miles of a shore plant.
6. The amount of abalones to be taken from each zone will be fixed by the Ministry of Marine and will be based upon the average catch of the past five years.
7. Closed seasons are established from January 15 to March 15.

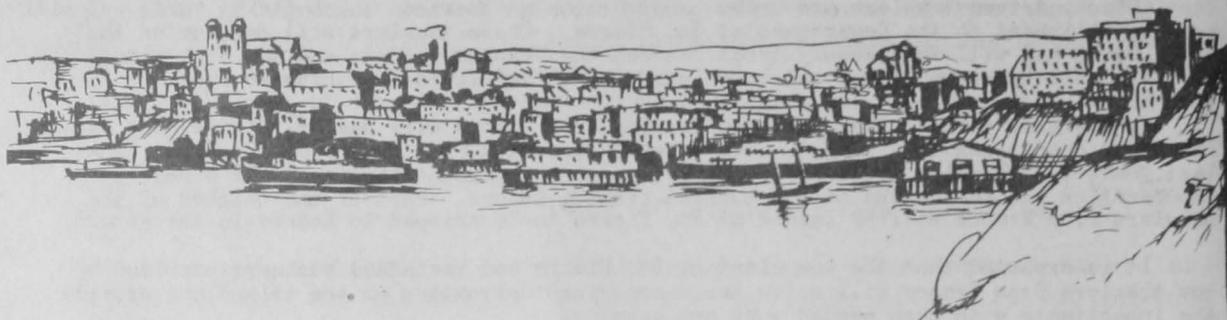


Newfoundland

SUMMARY OF CURRENT ECONOMIC INFORMATION: The Office of International Trade, U. S. Department of Commerce, has issued a report on Newfoundland, with particular emphasis on geographic and economic facts. Based on reports by the Foreign Service of the United States, it is a comprehensive, though brief, outline containing information of interest to anyone having business contacts with Newfoundland.

Copies may be obtained from the Superintendent of Documents, Washington 25, D. C., or any field office of the Department of Commerce. The price is 5 cents.

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REVIEW OF NEWFOUNDLAND'S 1946 FISHERIES SEASON: The cod fishery has long been the dominant industry of Newfoundland. During the war, newsprint for a time superseded the cod fishery from the export angle, as large numbers of men turned from the fisheries to join the armed services and to engage in work on American and Canadian military bases in Newfoundland. During the past few years, this trend has been gradually reversed, and by 1945 the fisheries again constituted the leading export industry, according to the American Consulate General, St. John's, Newfoundland.

In 1946, the catch of codfish approximated that for the highly successful 1945 season. The frozen fillet industry, after rapidly expanding in 1944 and 1945, leveled off, production falling a little short of the record 1945 figure. The herring industry, estimated largely by UNRRA orders, continued to flourish, production well exceeding the 1945 figures. Other fisheries, including sealing, lobsters, salmon, and whaling, generally compared favorably with 1945. Exports of fish oils exceeded those for 1945.

SALT CODFISH: Production: The estimated quantity of codfish salted during 1946 was 110,604,256 pounds, about the same as the production of 1945 (106,984,304 pounds), according to the Newfoundland Fisheries Board. Final figures for the 1946 season follow (in pounds):

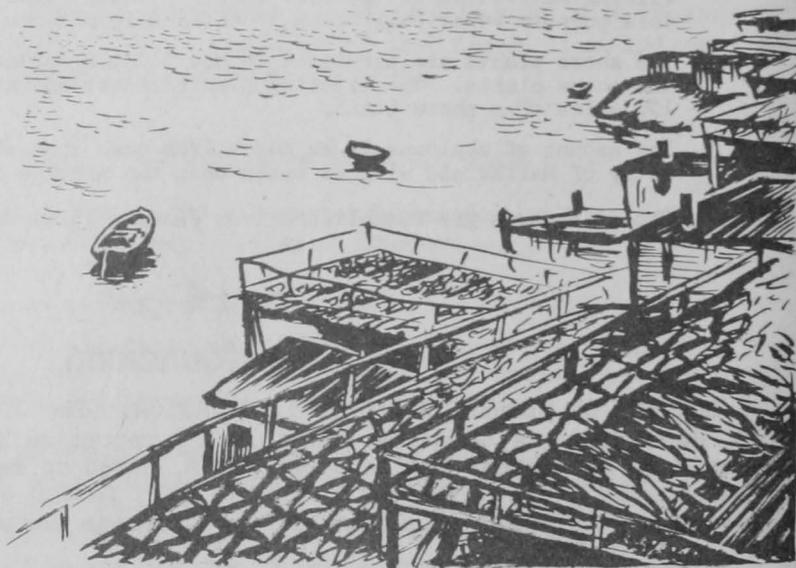
Inshore fishery-	72,713,872
Deep-sea "	- 15,250,592
Labrador "	- 22,639,792
Total	110,604,256

In 1945, production was broken down as follows (in pounds):

Inshore fishery-	71,848,224
Deep-sea "	- 14,294,560
Labrador "	- 20,841,520
Total	106,984,304

An estimated 25,892 fishermen engaged in the fisheries during 1946, compared with about 24,836 in 1945, and 22,400 in 1944.

NOTE: All values cited in this report are in Canadian dollars. \$1.00 Canadian = \$1.00 U.S. The source of the tabular data in most instances is the Newfoundland Fisheries Board. One hundredweight (cwt.) = 112 pounds. One quintal = 112 pounds. One imperial gallon = 1.20094 U.S. gallons.



For the second successive year, the trap fishery in some districts, particularly on the North East Coast, was extremely poor. However, a good fall fishery offset this to a considerable extent. Unfortunately, the Labrador fishery was again somewhat disappointing. The deep-sea fishery was well up to average.

Exports: During 1946, exports of salt codfish reached a figure of 110,331,872 pounds--about the same as the amount for 1945 (111,844,768 pounds). These may be broken down by countries of destination as follows (in pounds):

<u>Country of Destination</u>	1946	1945
Spain	18,577,888	27,010,816
Portugal	18,074,448	15,441,664
Brazil	5,216,960	4,676,224
United States	940,464	611,856
Canada	310,800	452,032
Jamaica	10,595,200	11,368,000
Barbados	1,743,392	2,102,912
Trinidad	1,411,200	1,880,704
Puerto Rico	16,205,280	19,145,168
Cuba	473,088	328,496
Italy	20,524,784	12,186,608
Greece	8,388,352	8,533,056
Sundry West Indies	5,591,040	5,870,704
Other Sundry Markets	2,278,976	2,236,528
Total	110,331,872	111,844,768

In addition to the above indicated exports of dried salt codfish, 94,150 cwts. of saltbulk were exported during 1946, compared with 75,622 cwts. in 1945. These exports may be broken down by countries of destination as follows (in cwts.):

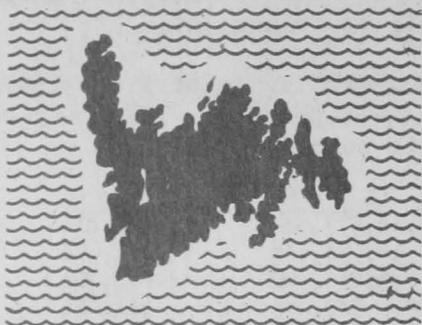
<u>Country of Destination</u>	1946	1945
United Kingdom	21,017	37,622
United States	39,340	35,216
Canada	33,793	2,784
Total	94,150	75,622

Prices: Early in 1946, representatives of fishermen's organizations again met with the Marketing Administrative Committee and the Fisheries Board to discuss the question of prices which might be paid to fishermen for the 1946 production. After a thorough examination of the position, it was agreed that no prices should be fixed and that these be left for negotiation between individual fishermen and merchants, it being understood that the removal of the wartime-enacted export levy of 25¢-50¢ per quintal on salted fish would automatically mean proportionate increases over the prices paid in 1945 to fishermen. (This export levy had been collected during the war years by the Government, and was discontinued in July 1946. The levy ranged from 25¢ to 50¢ per quintal, depending upon the type of cure.) The Government, on the other hand, raised the normal export levy on salt codfish, which had been in effect long before the war, from 2¢ to 5¢ per quintal. Prices obtained by exporters were the same as in 1945.

Foreign Fishing on the Grand Banks: French and Portuguese vessels have been more active in fishing off the Grand Banks. Such foreign fishing, of course, all but disappeared during the war, but it is now resuming its prewar importance.

French vessels in particular have enjoyed a considerable increase in fishing on the famous Newfoundland Grand Banks. During 1946, ten French trawlers engaged in this fishery, compared with only two during 1945. According to the French Consul, the catch during 1946 compared favorably with any prewar year. The leading vessel

of the 1946 French fleet took to France 53,000 quintals (about 5,936,000 pounds) of salt codfish, according to the Consul.



Six trawlers from Portugal prosecuted the fisheries off the Grand Banks in 1946, the same number as in 1945. In addition, 49 smaller vessels engaged in the Grand Banks fishery, about the same number as in 1945.

FROZEN CODFISH: This important and relatively new branch of the cod fishery maintained nearly the high production level reached in 1945. At the beginning of the year it was feared that the production of frozen cod fillets might have to be reduced, as it appeared likely that sales to the United Kingdom Ministry of Food would be much less than last year. Although this proved to be the case, and only 8,541,120 pounds were sold to the Ministry, as compared with 19,500,000 pounds in 1945, fortunately a further sale of 4,480,000 pounds was made later in the year, through the Ministry of Food, to the Allied Control Commission in Germany. As a result of this and increased sales to the United States, exports of frozen cod fillets amounted to 32,657,261 pounds, compared with 33,880,925 in 1945.

Fifteen quick-freezing and three sharp-freezing plants operated during 1946, as in 1945--representing a capital investment of over five million dollars. Production of frozen fillets of all varieties amounted to 30,151,140 pounds, compared with 31,403,553 pounds in 1945. As in 1945, by far the greater part of the fillet production consisted of cod fillets, the break-down being as follows (in pounds):

Cod fillets	28,219,556
Haddock	1,561,540
Rosefish	148,215
Others	221,829
Total	<u>30,151,140</u>

During 1946, three dragger-type vessels were introduced in Newfoundland fishing. All were used in connection with the fresh fish industry. A leading fishery concern plans to add three new ships to its dragger fleet in 1947. The use of draggers bids fair to make obsolete the hook and line dory fishing methods--but in Newfoundland, old methods often die hard, and it will likely be some time before modernization is completed.

The following table shows exports of codfish fillets from Newfoundland during 1946, with figures for 1945 in comparison (in pounds):

<u>Country of Destination</u>	<u>1946</u>	<u>1945</u>
United Kingdom	13,118,260	19,258,963
United States	12,725,095	6,055,073
Canada	6,809,391	8,565,501
Bermuda	4,515	-
Australia	-	1,120
Portugal	-	268
Total	<u>32,657,261</u>	<u>33,880,925</u>

HERRING: UNRRA orders continued markedly to stimulate this now important branch of Newfoundland's fisheries. It may be recalled that in August 1945, it was announced that UNRRA contracted for 45,000,000 pounds (approximately 200,000 barrels of 225 pounds each); early in 1946 an additional contract was signed for

25,000,000 pounds (approximately 110,000 barrels). The second contract called for a price of 6¢ per pound U. S. funds, as compared with 7¢ in the original contract. In both contracts, the type of herring was hard-cured, split herring.

In May 1946, the Newfoundland Fisheries Board announced that the season for catching herring for the UNRRA contracts was extended to June 15, subject to the condition that the Board would order all packing to cease immediately in any area in which the advice of inspectors showed any signs of deterioration in quality.



Inasmuch as the second contract was not sought by UNRRA until relatively late in the season, and the Fisheries Board had imposed a quota system on herring packers in order to forestall possible overproduction, the total pack only reached a figure of 189,320 barrels. The pack of filleted, dressed, and other cures of herring amounted to some 66,120 barrels.

The 1945-46 fall-winter pack of Newfoundland Scotch cure herring amounted to 20,925 barrels, although a contract had been arranged for 25,000 barrels.

A contract was arranged by the Fisheries Board for the supply of up to 10,000 barrels of Scotch cure herring and 4,400 barrels of dressed and filleted herring from Labrador, but because of the poor fishery, only 1,148 barrels and 882 barrels, respectively, were packed.

For the 1946-47 season, a contract was made by the Fisheries Board for 33,000 barrels of Scotch cure herring, and negotiations were opened with UNRRA for packing for relief purposes.

The following figures, showing exports rather than production of herring, indicate the important extent to which UNRRA relief orders stimulated this industry (in pounds):

Newfoundland Scotch Cure Herring	5,591,535
Hard Cure Split Herring:	
UNRRA	42,597,130
Other	649,565
Filleted, dressed, and other cures	16,116,420

Of the total exports of Scotch cure herring and filleted, dressed, and other cures of herring, about 90 percent went to the United States.

Late in December 1946, the Fisheries Board announced that the packing of dressed and filleted herring would be prohibited on the West Coast and in Placentia Bay--the chief herring areas--from midnight December 31, 1946. This order was made because of the carry-over in markets abroad of substantial quantities of last season's pack and the renewed activity in the markets by other producing countries. Individual quotas, it was also announced, would be issued to packers for the quantity packed up to December 31, but no additional quotas would be issued until further notice. The Board stipulated as a condition of the granting of any license to export dressed and filleted herring in brine, that sales be made at or above the following prices, f.o.b. Newfoundland export point, payable in American funds

or Canadian equivalent; dressed, \$15.00 per barrel; fillets, \$20.00 per barrel; and skinned fillets, \$26.50 per barrel. These prices are based upon a standard barrel containing 225 pounds net weight of fish.

The prices paid the fishermen for herring ranged from \$2.50 a barrel to as high as \$4.50 a barrel, with quotations generally holding to the lower figure.

SEALING: Twelve vessels, many of them small, prosecuted the sealfishery in 1946--having a net tonnage of 1,346 and crews totaling 352 men. The total catch was 34,241, valued at \$119,993.00. The S. S. Eagle, the only steamer prosecuting the sealfishery, was responsible for a catch of 7,757 of these seals.

LOBSTERS: Exports of live lobsters showed an increase of over 400,000 pounds over those for 1945. Exports for 1946 were 2,581,537 pounds, compared with 2,177,728 pounds in 1945. Exports of canned lobsters amounted to only 193,487 pounds, showing that almost the whole volume of this trade is now in live lobsters. The total catch of lobsters for 1946 amounted to approximately 3,564,906 pounds, as compared with 3,454,119 pounds in 1945.



SALMON: Exports of chilled salmon increased by over one-half million pounds during 1946, but frozen salmon exports were slightly below the 1945 figure.

Comparative figures were as follows (in pounds):

	1946	1945
Fresh and Frozen	2,126,773	1,595,598
Pickled	124,000	106,000

Exports of canned salmon amounted to 6,200 cases, somewhat below the figure for 1945 (7,676 cases).

SQUID: The squid fishery was more successful than it has been for many years, and the demand for squid strong. In view of the demand and in order to protect export markets, a squid marketing group was formed at the request of the trade, to be operated on similar lines as the groups associated with the salt codfish trade. The Newfoundland Dried Squid Exporters Association, Ltd., came into being, and shipments were handled and sales made by them on behalf of licensed exporters who were permitted membership in the group. An amendment was made to the Squid Regulations under which all those intending to engage in the packing of dried squid are required to obtain a license from the Board. It is now mandatory that all squid exports be made by the new Association. Similarly to the marketing groups formed in recent years, sales are made on a pro rata basis, depending on the size of each member-producer's pack.

FISHERY SALT: Early in 1946, it was decided by the Government to discontinue its policy of controlling the importation of fishery salt. However, regulations were made fixing the maximum prices which could be charged by salt importers. It was because of this change of policy that the salt levy which had been charged previously on all exportations of salted fish and other products of the fisheries was discontinued on 1946 productions.

CANNED FISH: Newfoundland's experience in the past with canning plants has been unfortunate; instead of concentrating operations in a relatively few large plants, several hundred small-scale operators have attempted to open plants. A few have maintained high standards, but many others have sold sub-standard prod-

ucts, to the consequent detriment of all Newfoundland canners. The Newfoundland Fisheries Board has conducted a quiet but effective campaign during the past several years, with the result that several score small below-par operators have gone out of business.

During 1946, only six licenses were issued by the Board to can codfish, and an analysis of the various packs was made from time to time by the Fisheries Research Laboratory in order that faults could be rectified and markets thus protected.

Work continued during 1946 on the construction of a new canning factory, to be operated as a subsidiary of a Canadian company. The factory will largely confine itself to the canning of herring, and will be located at Petries Point, on the West Coast. This is the type of enterprise which the Fisheries Board is endeavoring to encourage--a modern factory equipped with the latest-type machinery, capable of producing an article which would build up a favorable reputation in export markets. It is expected that the plant will be in operation in the spring of 1947.

RESEARCH: The Newfoundland Industrial Development Board has continued research commenced three years ago on a new method for preserving fish without salt or freezing. The research scientist with whom the Board has corresponded represents this process as being economical and suitable for small and widespread operations. Progress made thus far has resulted in a commercial experimental plant being recently erected.

Several American parties interested in the possibilities of obtaining pearl essence from herring scales have also visited Newfoundland during the past two years, and preliminary steps have been taken in the possible erection of a processing plant in the Humber Valley area on the West Coast.

The Newfoundland Industrial Development Board has also obtained basic data concerning the possible conversion of fish wastes into fish meal (cost of equipment, plans for factories, etc.). These data have been submitted to various fish processing firms, but as yet none has found it possible to take any action in this matter.

Late in December 1946, a representative of a United States firm arrived in Newfoundland to investigate the possibilities of developing the scallop fishery on the West Coast. Large scallop beds are known to exist off the Bay of Islands and in the St. George's area, but Newfoundlanders do not appear to have developed a taste for them as in the United States.

LOCALLY BUILT MARINE ENGINES: The new industry started in 1944 for the manufacture of small marine engines for fishermen has continued to expand. During 1946, 73 $7\frac{1}{2}$ -h.p. motors were shipped, bringing the total number of deliveries since the inception of the industry to 135.

PROSPECTS FOR 1947--COD FISHERY: The outlook is for a production of salt codfish in 1947 approximating that of 1945 and 1946. Some 24,600 men are expected to engage in the fisheries during 1947. This figure might be expected to change only if there should be an unanticipated recruitment of Newfoundland workers abroad or a sudden diminishment of employment on American military bases in Newfoundland--neither contingency being likely to arise.

Prices obtained by exporters for salt codfish during 1947 are expected to approximate those prevailing in 1946. It is strongly probable that prices paid to fishermen will again be left for negotiation between individual fishermen and merchants, and will find a level close to that of 1946.

Marketing difficulties largely prevented an expansion of the frozen cod fillet industry in 1946, and the same difficulties--on a perhaps greater scale--are forecast for 1947. Sales to the United Kingdom, which dropped from 19½ million pounds in 1945 to 8½ million pounds in 1946, may virtually disappear in 1947, as European fisheries continue to expand.

Local exporters probably rightly consider that the future of the cod fillet industry depends upon increased exploitation of the United States market. This in turn will largely depend upon tariff policies adopted by the United States Government, and upon the outcome of pending international trade negotiations.

The Committee on Fisheries of Newfoundland National Convention stated in part in its interim report on the cold storage industry:

"Imports into the U. S. A. market, our main hope for the future, are subject to duty. A quota, available to Canada and Newfoundland, enters the U. S. A. under a preferential rate of 1-7/8¢ per pound. All over the quota is subject to 2½¢ per pound duty. Any increase in the duty would be disastrous, and it is probably that only with some definite long term arrangements for free entry or considerably reduced duty into the U. S. A. will it be possible to greatly expand this industry in Newfoundland, as expansion on any materially increased scale does not seem practical until this question of the U. S. A. tariff has been settled for years ahead ..."

Because of the general uncertainty with respect to the marketing of fillets, it is likely that there will be little or no expansion of the industry in Newfoundland in 1947--as was the case in 1946. Thus, while the industry unquestionably plays a role of importance in Newfoundland's economy, there is no immediate hope that it will develop to a point where it might challenge the salt cod fishery as the dominant industry of Newfoundland.

SUBSIDIARY FISHERIES: It is clear that the herring fishery has received its greatest impetus from UNRRA orders, and these will eventually disappear. The 1947 outlook, however, was brightened when it was announced by the Newfoundland Fisheries Board early in January that a new contract for 50,000 barrels (11,250,000 pounds) of split herring had been closed with UNRRA. The herring is to be of the same type as previously supplied by Newfoundland, and is to be packed in the first four months of 1947. The price to be paid is 6¢ per pound, U. S. funds, f.o.b. steamer at ocean ports in Newfoundland. Late in January the Fisheries Board allocated quotas to herring packers, similar to the procedure adopted in previous years.

The herring industry is likely also to be stimulated by the canning factory now being constructed on the West Coast.



The seal fishery in 1947 will have the benefit of a government aerial survey of the ice-fields, to assist the seal fishing fleet in spotting seals and reporting general conditions of ice. This service is scheduled to go into operation on February 20, 1947, and will continue for approximately one month. The operational base will probably be at Gander. - A Lockheed type two-engine plane

will be used and chartered from the Maritime Central Airways, Charlottetown, Prince Edward Island.

Plans to inaugurate an air freight service for the purpose of transporting fresh lobsters to the Canadian and American markets have met with difficulties owing to the fact that lack of road facilities makes it impracticable to have the lobsters collected and routed to a central locality. It is not certain, at present writing, that this will develop into a successful venture during 1947.

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NEWFOUNDLAND'S FISH OILS, 1946: Newfoundland's production and export of fish oils in 1946 were confined, as usual, to the following types, in the order of importance: common cod oil, refined cod liver oil, whale oil, sperm oil, seal oil, herring oil, poultry oil, and dogfish oil, according to the American Consulate General, St. John's, Newfoundland.

The highlights of the 1946 season were as follows:

1. A 26 percent increase in cod liver oil (medicinal) production and exports, with the latter moving largely to the United States market at highly satisfactory prices.
2. The selling of a crude grade of medicinal cod liver oil to buyers in the United States, for the extraction of the vitamin A content-- the first time Newfoundland cod liver oil has been handled for such a purpose, at least on a large scale.
3. A more-than-100 percent increase in the price of common cod oil exports to the United States, following the removal of ceiling prices.
4. A doubling of exports of whale oil, going by allocation largely to Canada.
5. A 70 percent increase in exports of seal oil, reflecting the partial revival of the once highly important seal fishery.
6. The failure to register any substantial production of herring oil.

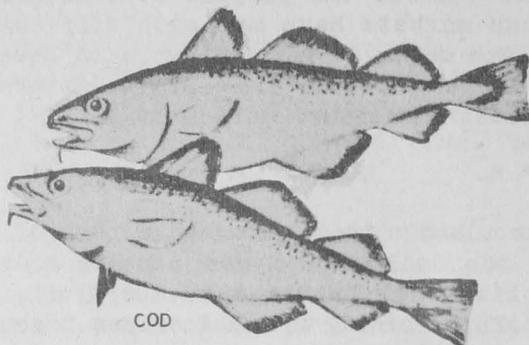
PRODUCTION: No department or agency of the Newfoundland Government maintains complete statistics on the production or consumption of fish oils. The consumption of fish oils in Newfoundland, however, is stated by the Newfoundland Fisheries Board to be relatively unimportant, almost the entire production being exported. Figures covering exports of fish oils, therefore, give a reasonably accurate picture of production (see EXPORTS). The discussion in this section will therefore largely be confined to a consideration of important factors with respect to production, and will include statistical estimates where available.

Cod Oils: The production of cod oils, of course, is ultimately dependent upon the catch of codfish,^{1/} but production of cod liver oil in Newfoundland is limited by the lack of a large home market and by a low vitamin D content. An additional important limiting factor is the small supply of oil due to the methods of catch. While in other countries liver oil is produced on board trawlers and

^{1/}See previous article "Review of Newfoundland's 1946 Fisheries Season" for production of codfish.

NOTE: One imperial gallon = 1.20094 U.S. gallons. Sources of data: Newfoundland Fisheries Board, Department of Natural Resources, oil exporters.

later refined, in Newfoundland this has not been possible owing to the small size of schooners used (rarely above 200 tons and for the most part less than 100 tons). Consequently, cod liver oil factories in Newfoundland depend strictly on reliable



supplies of shore codfish, brought to shore as early as possible after the catching, practically within a few hours. Newfoundland's cod liver oil industry is thus run in conjunction almost entirely with the shore fishery, and factories are located in the coastal areas in which the shore fishing is best and most dependable.

The export market price of refined oil has been an important factor in determining the production each season

of refined cod liver (medicinal) oil produced in relation to the amount of common cod oil (largely for tanners) produced. During the early part of 1946, the export market price of refined cod liver oil was at a high level, and partly for this reason the ratio of refined oil produced during 1946 was greater than in 1945.

Herring Oil: Two factories only have been responsible for Newfoundland's herring meal and herring oil production. Both of these factories were erected in 1941, and both commenced operations in 1942. The factory at Bay of Islands has been responsible for the greater part of Newfoundland's production and export of herring oil. In September 1944, however, this factory was destroyed by fire. As a result, exports of herring oil fell off from 405,937 imperial gallons in 1944 to 21,734 imperial gallons in 1945. However, the factory was quickly rebuilt, and resumed operations in 1946. The same managing interests also built a new plant at Belleoram, Fortune Bay, which came into operation in mid-1946. Production was limited in 1946, however, amounting to 4,785 imperial gallons. This was due to the failure of the new and rebuilt factories to get into production sufficiently early in the herring season.

Whale and Sperm Oil: The whaling industry has been prosecuted much more intensely in recent years than before the war. Six boats operated in 1946, compared with six during 1945, four in 1944, three in 1943, and only one for each of the three prior years. Two companies were responsible for Newfoundland's export of whale oils in 1946, as in 1945.

The 1946 season was highly satisfactory. The total catch for 1945 was 393 whales, the largest in years. In 1946, the total catch was even higher: 529 whales.

The growing importance of the whaling industry for Newfoundland is illustrated by the following table, setting forth the production of whales and whale oil (including sperm oil), during the six years 1941-46, inclusive:

Year	No. Whales Caught	Imperial Gallons Oil Produced	Year	No. Whales Caught	Imperial Gallons Oil Produced
1941	72	74,200	1944	264	380,541
1942	72	87,720	1945	393	517,750
1943	152	247,040	1946	529	760,949

Seal Oil: Newfoundland's seal fishery, although of very considerable importance up to the war period, has until recently steadily declined. For purposes of com-

parison, it may be observed that during the five-year period 1935-39 production of seal oil amounted to over 3,000,000 imperial gallons, an average of over 600,000 imperial gallons per year. Production during 1942-44 stood at less than one-tenth this figure. In 1939, the most disappointing prewar year since 1932, only seven steamers engaged in the sealfishery. During the war, the sealfishery all but disappeared. In 1941, four steamers engaged in the sealfishery; in 1942, there were three; in 1943, none; in 1944, one; and during the 1945 season, none.

In 1946, only one steamer prosecuted the sealfishery, but production of seal oil reached the figure 129,892 imperial gallons, compared with 77,942 in 1945. This was largely due to the fair degree of success with which auxiliary and motor-vessels met in prosecuting the sealfishery.

The decline in the importance of the sealfishery has been principally due to three factors: (1) the disruption of activities brought about by the war; (2) high costs of production, in the form of high customs assessments on equipment and a relatively high internal profits tax; and (3) marketing difficulties--in particular, an all-but-prohibitive customs barrier raised by the United States Government a decade ago, in the form of a processing tax. Concerning the last point, it may be observed that since the levying of the American processing tax, the United States market has nearly disappeared, and that prior to the levying of this tax, more than 50 percent of Newfoundland's seal oil was exported to the United States.

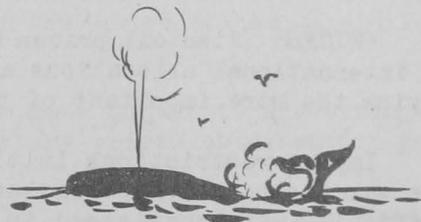
CONSUMPTION: Virtually the entire production of fish oils in Newfoundland is exported, the volume of home consumption being unimportant.

EXPORTS: The following table compares exports of fish oils from Newfoundland for 1946 with exports for 1945 (calendar years in both instances) (in imperial gallons):

Type of Fish Oil	1946	1945
Common Cod	499,192	554,400
Refined Cod	421,400	332,558
Poultry	4,039	18,320
Whale	621,623	299,877
Sperm	56,241	-
Seal	131,768	77,942
Herring	4,785	21,734
Dogfish	48	-
Total	1,739,096	1,304,831

Most of the common cod oil went to the United States by allocation during both 1945 and 1946. In 1945, exports of refined cod liver oil were made largely to Canada, owing to sizable shipments for relief purposes. In 1946, the United States took most of the refined cod liver oil exports, relief orders playing a more unimportant role.

Exports of whale oil nearly doubled, Canada taking the larger part by allocation. The year 1946 found new markets opened in Finland, the Netherlands, and Czechoslovakia. Sperm oil exports were substantial owing to a fair production plus the carrying over of sizable stocks.



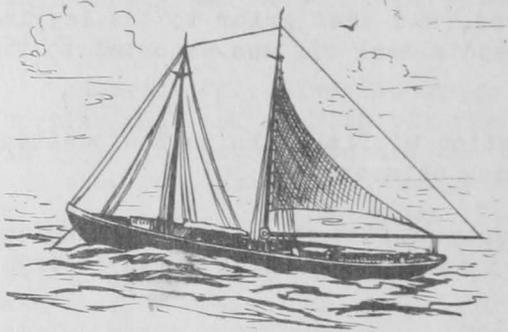
Exports of seal oil showed a 70 percent increase, reflecting the partial revival of the once important sealfishery. Canada was the largest market, by allocation.

Herring oil exports remained low owing to the failure of new and rebuilt plants to get into production sufficiently early in the herring season.

With the exception of cod liver oil, fish oil exports were governed largely by international marketing arrangements; reference in this connection should be made to the section of this report on "MARKETING."

STOCKS: Stocks of fish oils are not declared by producers or exporters to the Newfoundland Fisheries Board or any Government department. However, exporting is almost entirely handled by eight firms in St. John's, and it has been possible to make a careful canvassing of these firms in order to make a general comparison of the situation in 1946 as compared with 1945.

Stocks of common cod oil and cod liver oil at the end of 1946 were at the lowest level for at least a decade. Herring oil stocks were eliminated by the end of the year, it being noted that production was very small. Stocks of whale and sperm oils were low, and stocks of seal oil were negligible.



COD FISHING SCHOONER AT ANCHOR

exceeded the supply. Common cod oil production has been perhaps the lowest for a hundred years.

With respect to cod liver oil, stocks have been low compared with last year primarily because exporters have sold at highly profitable prices, mainly to the United States.

Concerning herring oil, the absence of any stocks has been due to the lack of any substantial production during 1946. In the case of whale and sperm oils, stocks have fallen off largely because of a good demand for these oils, sales having been at least as easy as in 1945.

PRICES: Fish oil prices have been influenced and in many instances governed by international allocations and by price fixing. It may therefore be useful to review the more important of these factors which have appeared in recent years.

Import restrictions initiated by many countries during the early years of the war dislocated Newfoundland's fish oil trade, and for a while considerable difficulty was experienced in marketing the production. In 1942, this was met to some extent by the purchase by the United States Government of a large quantity of Newfoundland oil, but in 1943 no such sales were made. Through the Oils and Fats Committee of the Combined Food Board, an arrangement for the allocation of certain oils, including Newfoundland common cod oil, was made. Eventually, the

total supply of Newfoundland's cod oil of 1943 production was sold to the buying agency nominated by the Combined Food Board; namely, the Commodity Price Stabilization Corporation, Ltd. (United States).

During 1943 and the early part of 1944, the price of common cod oil was set at fixed amounts per imperial gallon. In May 1944, the marketing arrangement with the Commodity Price Stabilization Corporation expired; thereafter, exporters were free to make their own sales. It was generally felt, however, that some control of prices should still be exercised. Accordingly, the Newfoundland Fisheries Board issued in June minimum prices for cod oils. In 1945, restrictions with respect to minimum prices were lifted, and prices have been a matter of negotiation between buyers and sellers. For a time, in 1945 and 1946, ceiling prices in the United States were the determining factor in these negotiations. With the removal of ceiling prices in the United States, prices were determined, for the first time in years, by normal factors of supply and demand. Common cod oil exports to the United States were priced at 78¢-85¢ per U. S. gallon, c.i.f.,^{2/} United States currency in 1945, but commanded considerably higher prices early in 1946. With the removal of price controls late in 1946, the price jumped to nearly \$2.00 per imperial gallon (over \$1.60 per U. S. gallon), c.i.f., United States currency--more than double the price in 1945, and perhaps 500 percent or more above prewar prices.^{3/} (All prices quoted in this section are average prices for average quality unless otherwise stated.)

The sale of cod liver oil, unlike common cod oil, has never been channeled through government corporations; sales have been made direct to private buyers. During 1946, refiners paid fishermen an average of \$1.90 Canadian currency per imperial gallon, well above the \$1.75 paid in 1945. Exports of cod liver oil to the United States were priced at \$1.85-\$2.05, c.i.f., per U. S. gallon, United States currency. Top-grade (non-freezing) cod liver oil sold in 1946 at \$2.70 per U. S. gallon, United States currency, c.i.f., compared with \$2.30 in 1945.

Whale oil sold at a price somewhat higher than the \$.759 per imperial gallon (Canadian currency) f.o.b. Newfoundland shipping point, prevalent in 1945. Seal oil exports showed a very substantial increase over 1945; in that year seal oil sold at 85¢-90¢ (Canadian currency) per imperial gallon, f.o.b., St. John's. In 1946, the price reached \$1.22 per imperial gallon, c.i.f., New York, U. S. currency.

MARKETING: As indicated in the previous section, the marketing of common cod oil up to May 1944 was effected through the Commodity Price Stabilization Corporation, Ltd., in the United States and Canada. In May 1944, this arrangement expired, and exporters were left free to make their own sales, but at fixed prices. In 1945, restrictions with respect to minimum prices were lifted, and sales became entirely a matter of negotiation between buyers and sellers. In August 1945, the Oils and Fats Committee of the Combined Food Board allocated 200 tons of common cod oil to Canada, the balance going to the United States. A similar arrangement was made in 1946.

The sale of cod liver oil (medicinal) has never been subject to the arrangement described for cod oil. Owing to the satisfactory prices obtained for cod liver oil, no sizable stocks accumulated.

^{2/}c.i.f. - Cost, Insurance, Freight

^{3/}For convenience in reference, it is repeated that one imperial gallon = 1.20094 U.S. gallons. In considering the price differentials, adjustment should be made for the rise in the exchange rate of the Canadian dollar on July 5, 1946--from \$1.10 to par in relation to the U.S. dollar. This lessens the apparent abruptness of many of the price rises in fish oils, but by no means offsets such rises.

On the recommendation of the Fats and Oils Committee of the Combined Food Board, it was agreed by the Newfoundland Fisheries Board, after consultation with the trade, that Newfoundland's 1946 production of whale and seal oils should be allocated to Canada--as was the case in 1945. Herring oil of 1946 production was allocated entirely to the United States--as in 1945. No exports of allocated oils have been allowed except by permission of the Newfoundland Fisheries Board.

Herring oil, whale oil, sperm oil, and seal oil have been marketed through the Commodity Stabilization Corporation, Ltd., to the United States and Canada. Certainty as to prices and sales has thus characterized transactions in these oils, as in the case of common cod oil up to May 1944. Herring oil has found a ready market owing partly to its use in the production of soaps, explosives, and ship paint. Whale oil has been used as an ingredient of certain types of explosives, of margarine, and of soaps.



OUTLOOK FOR 1947 SEASON: Local exporters of fish oils look forward with mixed optimism to the 1947 season. It is generally felt that the scramble for the world's limited supplies of fats and oils, which bid the prices of oil-bearing materials to record highs in 1946--despite allocations of the IEFCC--seems likely to continue in 1947. Of course, sooner or later this condition will cease to exist; nevertheless, the outlook for 1947, taken as a whole, is for a season at least as successful as 1946.

The prospects for the local common cod oil industry is for a season marked by very high prices and profits early in 1947, followed by a price break of at least 60 percent, according to a large exporting firm of cod liver oils. Local exporters do not believe that present prices can hold, and, furthermore, they are of the opinion that production in Newfoundland and other cod oil producing countries will increase sufficiently to bring supply and demand more nearly into a normal balance. Production of all cod oils in Newfoundland, of course, will depend upon the catch of codfish; there are no special reasons apparent at present for anticipating much change from the 1946 season in this respect.

Concerning cod liver oil (medicinal), the outlook is for a season at least as good as in 1946. A leading cod liver oil concern in Newfoundland anticipates selling cod liver oil at \$2.40-\$2.90 per U. S. gallon, c.i.f., New York, U. S. currency, depending on quality. The 1946 season was strongly affected by sizable sales of a crude grade of refined cod liver oil to buyers who extracted the vitamin A for resale in capsule or other forms. This may continue in 1947, making an excellent market for low grade cod liver oil. Production difficulties alone may hamper the 1947 season. If the price of common cod oil continues high, refiners may have difficulty in persuading fishermen to sell steam-processed liver oil, rather than the sun-rotted oil used for common cod oil.

Exporters of other types of fish oils; i.e., whale oil, seal oil, and herring oil, look forward with optimism to the 1947 season. The demand is expected to be as strong as in 1946. Production of whale and seal oils, of course, will depend upon the degree of success which attend the whale fishery and the seal fishery, both highly speculative undertakings. At present writing, little can be said in this respect concerning the whale fishery. But early reports from the seal fishery have been most encouraging. Production of herring oil should rise abruptly as the Bay of Islands' plant goes into full production for the first time since 1944, and a new plant at Belleoram commences operations.